202306UECM1404OE3a

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Review of preview

Started on	Friday, 18 August 2023, 06:08 PM
Completed on	Friday, 18 August 2023, 06:09 PM
Time taken	6 secs
Grade	**0** out of a maximum of 10 (**0**%)

1
Marks: 1

John borrows 76,000 that is to be paid back over 14 years with level monthly payments at the end of each month. The interest is charged on the loan at a nominal rate of 6% compunded monthly. On the due date of the 50th payment. John decides to repay the loan in full with a single payment of X. Calculate X. _____

Answer:

Make comment or override grade

Incorrect
Correct answer: 60257.445436
Marks for this submission: 0/1.

2
Marks: 1

A 10,000 loan is being repaid with regular payments of X at the end of each year for as long as necessary plus a smaller payment one year after the final regular payment. Immediately after the 10th payment, the outstanding principal is 2 times the size of the regular payment (that is, 2X). If the annual interest rate i is 16%, what is the value of X? _____

Answer:

Make comment or override grade

Incorrect
Correct answer: 1891.57
Marks for this submission: 0/1.

3
Marks: 1

Allan buys a house and takes out a 110,000 50-year mortgage. The interest rate is 12% convertible monthly and Allan makes monthly payments of 1,353 for the first 3 years. Determine how large his monthly payment needs to be for the remaining 47 years in order to pay off the mortgage at the end of the 50-year period. _____

Answer:

Make comment or override grade

Incorrect
Correct answer: 994.649752
Marks for this submission: 0/1.

4
Marks: 1

You took a mortgage loan of 400,000 on January 1, 2022 which required to pay 35 equal annual payments at 10% interest with the first payment due on January 1, 2023. The bank sold your mortgage to an investor immediately after receiving your 8th payment. The yield to the investor is 6%. Determine the bank's overall return on its investment. _____

Answer:

Make comment or override grade

Incorrect
Correct answer: 0.132421
Marks for this submission: 0/1.

5
Marks: 1

Steven have a 30-year 150,000 mortgage with an 6% interest rate convertibele monthly. Payments are made at the end of the month. Immediate after the 120th payment, he refinance the mortgage. The iterest rate is reduced to 4.5%, convertibele monthly, and the term is reduced to 20 years (so there are 10 years of payments remainning). He also make an additional payment of 20,000 at the time of refinancing. Calculate his new monthly payment. _____

Answer:

Make comment or override grade

Incorrect

Correct answer: 1093.681488
Marks for this submission: 0/1.

6 Marks: 1

Mike takes out a 30-year loan on January 1, 2012 for 30,000 at an annual effective interest rate of 4%. Payments are made at the end of each year. On January 1, 2022, Mike takes out a 20-year loan for 15,000 at an annual effective interest rate of 6%. Payments are also made at the end of each year. Calculate the total amount of principal repaid during year 2022 on both loans. _____

Answer:

Make comment or override grade

Incorrect
Correct answer: 1199.555425
Marks for this submission: 0/1.

7 Marks: 1

A loan is being amortized by means of level monthly payments at an annuial effective interest rate of 6%. the amount of principal repaid in the 16th payment is 4000 and the amount of principal repaid in the t-th payment is 14000. Calculate t. _____

Answer:

Make comment or override grade

Incorrect
Correct answer: 273.996179
Marks for this submission: 0/1.

8 Marks: 1

A 4,000 loan is to be repaid with equal payments at the end of each year for 30 years. The principal portion of the 13th payment is 1.1 times the principal portion of the 6th payment. Calculate the total amount of interest paid on the loan. _____

Answer:

Make comment or override grade

Incorrect
Correct answer: 905
Marks for this submission: 0/1.

9 Marks: 1

Alvin purchases a 170,000 home. Mortgage payments are to made monthly for 30 years, with the first payment to be made one month from now. The annual effective rate of interest is 5%. After 10 years, the amount of each monthly payment is increased by 553.19 in order to repay the mortgage more quickly. Calculate the amount of interest paid over the duration of the loan. _____

Answer:

Make comment or override grade

Incorrect
Correct answer: 112642
Marks for this submission: 0/1.

10 Marks: 1

A loan of 300,000 is being amortized with payments at the end of each year for 10 years. If $v^5 = 0.852$, find the amount of principal repaid in the first 5 years. _____

Answer:

Make comment or override grade

Incorrect
Correct answer: 138013
Marks for this submission: 0/1.